

V-III = III-V

ICMOVPE 8 in Cardiff

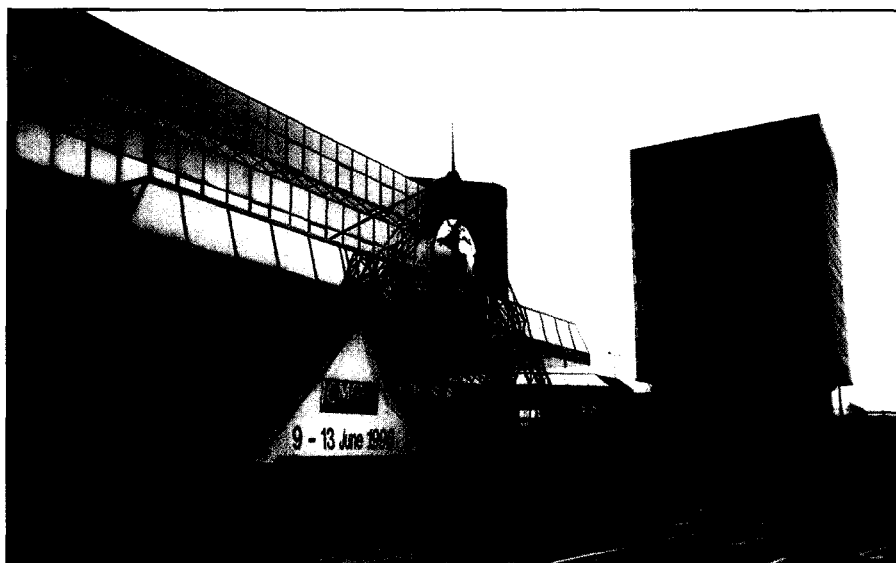
by Roy Szweda

Eight meetings on, the International Conference on MOVPE reconvened in Cardiff, Wales, the epicentre of MOCVD. Though the weather was dull for the start, this did not dim the enthusiasm for the delegates – over 350 – nor exhibitors – over 20. Truly this was an epi(c) meeting which well represented the burgeoning epi-based device business. Indeed, business seemed to be done as news circulated of new plants, IPO's, MBO's and renamings.

Following on from a successful meeting in Japan, ICMOVPE returned to Europe having previously been in Aachen in 1990 (my first ICMOVPE). I enjoyed that one and also the one in Boston two years later – ICMOVPE returns to the USA in 1998 and meanwhile just who gets the "End of the Millenium MOCVD Meeting" in 2000 seems to be full of Eastern promise.

III-Vs Review took a booth in the busy Technical Exhibit of materials and equipment vendors. Inevitably there was a good local presence but just about all the global majors were there. From this vantage point and others we were able to catch up on much of the industry's business and technical discussions and herein you will find some of the news we can print and a flavour of the gossip we often can't.

In particular, ICMOVPE was well-timed for what might be termed as "mine host" – Epitaxial Products International. Not only was E.P.I. (and other companies) able to invite guests for tours, but also formally announce its MBO (see sidebar) by the company directors and co-founders Mike Scott and the ICMOVPE Chairman, Drew Nelson. We were able to see and hear firsthand of the progress the company has been making since courtesy of our excellent E.P.I. tour guide Wyn Jones. As a massive gesture of self-sacrifice I went there (in the rain) instead of the planned Bass brewery tour – just



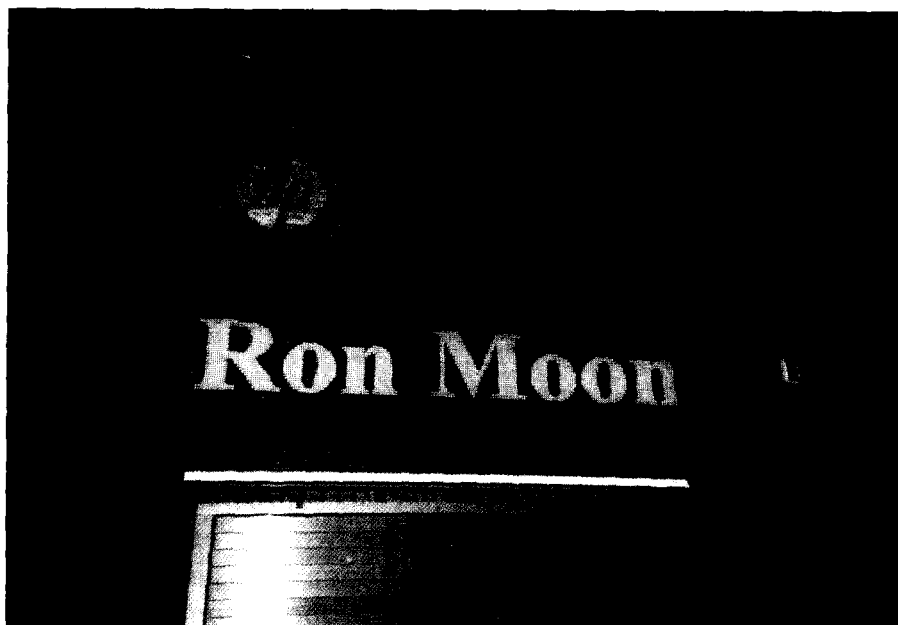
one part of the excellent social programme.

Things kicked off in splendid fashion on the Sunday evening with a welcoming "session" in the exhibit hall courtesy of EMCORE, the corporate sponsors. As you will read in the news section, this equipment company also had much to declare both during the meeting and at the post-ICMOVPE Users Group meeting. The exhibit was a busy throng of folks catching up on old friends and making new ones held in the Novello Suite conveniently adjacent to the learned sessions the following days.

Venturing into the cavernous main hall of the CIA (Cardiff International Centre – see photo) early next morning we later comers were a

little surprised to see the delegates seated in a tiered grandstand. This had been specially erected for the opening speeches and presentations along with a huge LED display of the kind you see at outdoor sports events (see photo). This giant display is the first fully mobile full-colour LED-based screen in Europe and was made in the UK by Invision Microsystems Ltd.

As you will see from one of the accompanying photos, Ron Moon of Hewlett-Packard was the first Plenary Speaker with his talk entitled "MOVPE – Is there any other technology for optoelectronics?". No doubt this will be viewed with some circumspection by MBE readers but the graphical presentation surely



made a convincing case for the excellent IR and visible device production underway at H-P, possibly the leading western manufacturer of these devices. Appropriately, the next speaker was Shuji Nakamura of Nichia Chemical Industries Ltd., currently at the forefront of blue emitting devices. He described some of his latest work in his talk entitled "First III-V nitride based violet diodes". Now well-known for his dramatically impressive visual demonstrations, he showed off the full-colour display with a mains-powered hand-held box together with his new battery-powered semiconductor UV LED. As was noted, the blue emitter gives you a big PR advantage over the IR guys! Now it has turned full-circle with the "black light" UV emitters. After the talk a small referendum was held to try to establish who had the whitest "whiter-than-white" shirt. Some fared better than others under the glare of the Nichia hand-held UV spotlight! The possibilities for such a compact source of UV are simply staggering, no less so than the blue emitters. A new industry is in the making.

Sponsorship plays a vital role at today's conference and ICMOVPE was no exception. It was generously supported not only by those mentioned above but also by — AIXTRON GmbH, Elsevier Science, Epichem Ltd., Hewlett-Packard Ltd., MCP Wafer Technology (who provided the delegate bags), Siemens Corporate Research, Thomas Swan & Co. Ltd. These companies were subtly con-

spicuous in their support — for instance Epichem as always provided a fine mix of culture and class with a two-shift wine-tasting in the Cardiff castle. On the Tuesday night E.P.I. did everyone proud with a drinks reception and buffet in the National Museum of Wales. Cartoons, caricatures and competitions blended with fine conversation to round off a hard-day's work in the busy sessions. Attendees of the week's pinnacle of receptions, the Conference Banquet sponsored by AIXTRON GmbH, enjoyed a sherry reception hosted by the Lord Mayor of Cardiff followed by a sit-down dinner in the Edwardian elegance of the Cardiff Assembly Hall.

Overall, the ICMOVPE-VIII was a resounding success and on behalf of all those who enjoyed its abundant technical and social fruits, I heartily thank Glenda Bland of Global Meeting Planning. Glenda is well-known to many for her conference organising skills — I well remember the excellent 1991 IPRM — and she and her team deserve a round of applause for their thoroughness and smooth running of ICMOVPE from start to finish.

Postscript

As stated earlier, the next ICMOVPE convenes in 1998 in the USA but if you can't wait that long there are two other MOVPE meetings in 1997: EWMOVPE and OMVPE, to be held in Berlin, Germany, and California, USA, respectively. For full contact details I invite you to look them up in the diary or adverts in this issue.

Directors of Epitaxial Products International in MBO from Shell UK

The co-founders and executive directors, Dr A W Nelson and Dr M D Scott, of Epitaxial Products International Ltd. of Cardiff, Wales, UK, announced the completion of an MBO of the Company from Shell Ventures UK Ltd.

EPI was founded in 1988 and is now one of the top manufacturers of advanced III-V compound epitaxial wafers worldwide, supplying many of the leading semiconductor companies. Over 95% of EPI's products are exported to USA, Japan and EEC. The sale of EPI by Shell UK forms part of its drive to dispose of non-core business.

"As part of the MBO arrangements, we have put in place appropriate long term capital equipment and R&D investment finance. EPI has been profitable for the last two years, has a strong cashflow and has experienced significant sales growth over the last several years," said Drew Nelson.

The MBO allows the Company to further improve and extend its product ranges with increased focus in providing a world leading custom epi wafer supply service.

Epichem Goes Worldwide

Epichem Ltd and Air Products & Chemicals Inc., have announced that Epichem is taking worldwide responsibility for the sales and marketing of its range of high quality organometallics used in the compound semiconductor industry. This will include the formation of a wholly-owned subsidiary Epichem Inc., which will assume full responsibilities for all aspects of the OM business from Air Products and Chemicals covering North and South America as well as the Pacific Rim. Gregory Muhr, Brenda Tagliavia and Griff Carpenter from Air Products, Electronics Division have joined the new company and will continue in their present roles. Air Products will continue to manufacture, package and ship organometallics including, TBA and TBP on behalf of Epichem under a long term tolling agreement.